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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,420	12/21/2001	Andrew V. Maroney	537-1065	5738

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EXAMINER

MOSKOWITZ, NELSON

ART UNIT PAPER NUMBER

3663

DATE MAILED: 02/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

BEST AVAILABLE COPY

Office Action Summary

Application No.

10/032,420

Applicant(s)

MARONEY ET AL

Examiner

Nelson Moskowitz

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

1. Applicant's letter received December 8, 2003, has been made of record, Applicant's amendments have been entered, and Applicant's arguments have been carefully considered.
2. The text of those section of Title 35 U.S. Code not included in this action can be found in a prior Office action.
3. In view of Applicant's amendments to both of the independent claims of record, the rejection of claims 1, 3-10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Broeng et al (reference "M" cited on the PTO-892) is hereby withdrawn.
4. Claims 1, 3-9 and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Voevodkin or Komine. See, inter alia, Voevodkin at columns 1-4, and in particular column 2, lines 31-65; Komine at column 3, lines 36-58.

Please note that the specific reference constituents cited herein are done so for the convenience of the Applicant and are in no way intended to be limiting. The reference should be considered in its entirety.

Applicant argues that Komine does not disclose controlling the possible transmission directions for stimulated emission frequencies in order to improve pump efficiency. This argument is inapposite as the pending claims fail to specifically recite this argued aspect of Applicant's disclosure.

Furthermore, Komine discloses the use of photonic bandgap material (18, 20) which causes the most desired mode of stimulated emission light propagation to experience the least amount of loss, and the undesirable modes of light propagation in the fiber to experience greater

losses. Thus, as the scattered optical beams combine destructively or constructively depending on their phase relationship, some light escapes latterly from the PBG material and some light is filtered out by the PBG material.


As regards Voevodkin, Applicant argues that this reference does not disclose a mechanism for the escape of spontaneous emission radiation. This argument is also inapposite, as the pending claims fail to specifically recite this argued aspect of Applicant's disclosure.

Furthermore, this reference discloses the use of PBG structures in fiber optic laser amplifiers to permit the output of light only in the axial direction, and filtering out all other light. It would therefore filter out all of the spontaneous emission radiation not traveling parallel to the direction of the length of the fiber.

5. Applicant is again requested to submit a PTO-1449 form listing all the references (patents and literature) cited in foreign country prosecution of this invention.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


NELSON MOSKOWITZ
PRIMARY EXAMINER